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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,264	04/09/2004	Gregg S. Baker	1220.0013-01	8615

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EXAMINER

AFTERGUT, JEFF H

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/821,264

Applicant(s)

BAKER, GREGG S.

Examiner

Jeff H. Aftergut

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-84 is/are pending in the application.
- 4a) Of the above claim(s) 1-60,68,69,71,72,80,81,83 and 84 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-67,70,73-79 and 82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election with traverse of Group II (identified by applicant in the response as Group I but directed to claims 61-84 which was Group II), the species of Figures 10A-10D in the reply filed on 11-30-06 is acknowledged. The traversal is on the ground(s) that most of the claims defined in the group are generic to the elected species and all of the claims should be examined together as they are generic. This is not found persuasive because in order to traverse a species restriction applicant must assert that the recited species are obvious over one another given the genus. The applicant has failed to provide such an argument. Additionally applicant has not addressed whether the article could be made by another and materially different process such as the use of nuts and bolts to attach the bracket to the helmet instead of the use of adhesive as defined in the process claims. As such, the groupings of claims is deemed appropriate.

The requirement is still deemed proper and is therefore made FINAL.

2. It should be noted that the election of Group II and the species of Figures 10A-10D is deemed to read on claims 61-67, 70, 73-79 and 82 and NOT claims 61-67, 70, 71, 73-79, 82 and 83 (as claims 71 and 83 require the attachment of at least one bracket to the side portion of the helmet which is not depicted in Figures 10A-10D. Accordingly, claims 71 and 83 are being treated as part of the non-elected species of invention and will not be further treated herein below.

3. Claims 1-60, 68, 69, 71, 72, 80, 81, 83, and 84 have been withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention

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and species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11-30-06.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 61-67, 70, 73-79 and 82 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 61 and 73 the applicant claims a "conventional helmet" or a "conventional racing helmet", however the scope of the same is not clearly defined. What is the exact nature of the conventional helmet or the conventional racing helmet? The applicant is required to clearly define what is meant by the same in the claim as over time what is conventional today might be vastly different from what is conventional 10 years from now or 10 years ago. It is suggested that applicant define in the claim specifically what the "conventional helmet" or "conventional racing helmet" is.

Regarding claims 63 and 75, the exact scope of the claim is unclear. It would appear that the minimum shear strength is not just a function of the adhesive utilized but also of the materials being joined together. As such, it is suggested that applicant recite the materials being joined together so that the specific shear strength has more meaning.

Regarding claims 66, 67, 78 and 79, the claims recite that the helmet is a "certified helmet" and/or a "SNELL-certified helmet". However, the exact certification

standard is not defined in the claims and thus it is unclear as to the exact scope of the claims as presented. It is suggested that applicant define the specific certification for the helmet in these claims in order to make it clear what the exact scope of these claims is.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 61, 64, 65 and 70 are rejected under 35 U.S.C. 102(b) as being anticipated by Keim.

Keim suggested a method of adapting a helmet to be used with a stabilizing system which limits the load acting on a wearer's head and generated by displacement, velocity or acceleration of the wearer's head with respect to the wearer's body wherein the head stabilization system included a connection structure including coupling mechanism 20 (which is a typical clevis type mount having plates 94, 96 and parallel supports 98, 100 as well as pin 102) as well as a resisting member including a fluid damping mechanism 16 (which included a fluid cylinder) which was positioned between the coupling mechanism 20 and was connected to the helmet with a bracket. The reference to Keim suggested that one skilled in the art would have connected the resisting member to the helmet through a guide rail 58 which was connected to the helmet with a suitable adhesive, see column 3, lines 28-34. The reference to Keim

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therefore taught the application of a bracket (guide rail 58) to a helmet with an adhesive for attachment of the resisting member to the helmet.

With regard to claims 64 and 65, note that the actual structure of the helmet remained unaltered by the application of the guide rail to the helmet in Keim. Regarding claim 70, note that the bracket was disposed at the back of the helmet as depicted by Keim.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 61-67, 70, 73-79, and 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keim in view of Japanese Patent 2001-355118, the admitted prior art and any one of Scotch-Weld Epoxy Adhesive 1838 B/A Green, 1838 B/A Tan, 1838-L B/A Translucent (May 1995) or Scotch-Weld Epoxy Adhesive EC-2615, EC 2615 LW (December 2002).

Keim is discussed at length above in paragraph 7 and applicant is referred to the same for a complete discussion of the reference. The applicant is advised that while the reference suggested that a suitable adhesive material would have been selected for the operation there is no indication as to what type of adhesive material this would have entailed. The reference additionally appears to be directed to sports helmets for football for instance and not a helmet for auto racing.

Japanese Patent '118 (note that while applicant has made a claim for continuity to Serial Number 10/245,007 which was filed 8-15-2002 and which claims the benefit of two provisional applications with filing dates of 8-17-2001 and 8-29-2001 respectively, the applicant is advised that the effective filing date of this application is April 9, 2004 because it was in this application that applicant first envisioned (and was in possession under 112, first paragraph) the use of adhesive to attach the bracket to the helmet and thus the applicant is not entitled to an effective filing date any earlier than the date that this application was filed) suggested that it was known at the time the invention was made to employ an epoxy adhesive to join a bracket to a helmet in order to avoid the need for drilling a hole in the helmet for attachment a bracket to the helmet. The reference clearly suggested that the use of an epoxy adhesive for securing the bracket to the helmet and that this did not effect the helmet as drilling a hole in the helmet would effect the same.

The reference to the admitted prior art suggested that those skilled in the art would have understood that helmets would have been worn by those involved in high speed driving of vehicles and that there was a need for preventing injury by associating the helmet to a belt or tether arrangement as such would prevent head and/or neck injuries as the head is susceptible to the same during high speed accidents where sudden stops were associated with the accident. The applicant is advised as such, one skilled in the art would have understood that the structure of Keim (which was concerned with restraining the head during a high speed collision) would have been suitable for adaptation to a motor vehicle helmet. Additionally, the admitted prior art

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appears to suggest that certification of such helmets is commonplace in the art and that attachment of the bracket with an adhesive material would have intrinsically not altered the helmet and thus not altered the helmet's ability to retain its certification. As Japanese Patent '118 provided a helmet which did not include drilling a hole in the helmet structure but instead employed an adhesive to secure the helmet to the bracket, one skilled in the art would have expected that attachment of the bracket in accordance with the use of adhesive as suggested by Keim would have not altered the certification of the helmet therein as it did not alter the helmet. The combination of teachings fail to teach that the epoxy adhesives utilized were "aerospace grade" or that they had the requisite shear strength.

Commercially available epoxy adhesives were known to have been aerospace grade materials with high shear strengths as evidenced by either one of Scotch-Weld Epoxy Adhesive 1838 B/A Green, 1838 B/A Tan, 1838-L B/A Translucent (May 1995) or Scotch-Weld Epoxy Adhesive EC-2615, EC 2615 LW (December 2002). The ordinary artisan would have readily appreciated that epoxy resin would have had a high shear strength in light of the evidence of either one of Scotch-Weld Epoxy Adhesive 1838 B/A Green, 1838 B/A Tan, 1838-L B/A Translucent (May 1995) or Scotch-Weld Epoxy Adhesive EC-2615, EC 2615 LW (December 2002) which are both directed to commercially available epoxy resins. Additionally one skilled in the art would have understood that the epoxy resins therein would have been useful aerospace adhesives (and various adhesive materials were used in the manufacture of aircraft including both non-structural adhesives as well as structural adhesives and the references to either

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one of Scotch-Weld Epoxy Adhesive 1838 B/A Green, 1838 B/A Tan, 1838-L B/A Translucent (May 1995) or Scotch-Weld Epoxy Adhesive EC-2615, EC 2615 LW (December 2002) appeared to suggest that the material was useful as structural adhesives). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ an adhesive to attach a bracket to the rear of a helmet as suggested by Keim wherein the helmet having the bracket secured thereto would have been understood to have been useful as a racing helmet as suggested by the applicant's admitted prior art and wherein the association of the bracket to the helmet with epoxy adhesive would have avoided the need for drilling a hole in the helmet as suggested by Japanese Patent '118 wherein those skilled in the art would have understood that an epoxy adhesive would have been a structural adhesive such as those of either one of Scotch-Weld Epoxy Adhesive 1838 B/A Green, 1838 B/A Tan, 1838-L B/A Translucent (May 1995) or Scotch-Weld Epoxy Adhesive EC-2615, EC 2615 LW (December 2002).

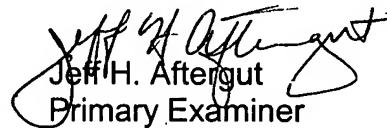
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff H. Aftergut whose telephone number is 571-272-1212. The examiner can normally be reached on Monday-Friday 7:15-345 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeff H. Aftergut
Primary Examiner
Art Unit 1733

JHA
March 8, 2006